

## EXHIBIT 4

**UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF SOUTH CAROLINA**

MARY T. THOMAS, et al.,

Plaintiffs,

v.

MARCI ANDINO, et al.,

Defendants.

**Declaration of Dr. Courtney D. Cogburn**

Pursuant to 28 U.S.C. § 1746, I hereby declare as follows:

1. I am an associate professor at the Columbia University School of Social Work, faculty of the Columbia Population Research Center and a core member of the Columbia Data Science Institute. I am also a faculty affiliate of the Center on African American Politics and Society. At Columbia, I direct the Cogburn Research Group and co-Direct the Justice Equity + Technology lab. I am a member of the Interdisciplinary Association of Population Health Science, Society for Personality and Social Psychology. I have also served as an ad hoc reviewer for Social Science & Medicine, Annals of Behavioral Medicine, Ethnicity & Health, Developmental Psychology and the Journal of the American Medical Association Network Open.
2. I received my B.A. in psychology from the University of Virginia in 2001, my Master of Social Work from the University of Michigan in 2002 and my PhD in education and psychology from the University of Michigan in 2010. I also completed postdoctoral training at the Institute for Social Research in 2012 as well as the Harvard TH Chan School of Public Health and the Harvard Center for Population and Development Studies in 2014.

3. I joined the faculty of the School of Social Work at Columbia as an assistant professor (2014-2019). I held a visiting scientist position at the Harvard TH Chan School of Public Health (2014-2016). I am currently an associate professor at the Columbia University School of Social Work (2019-present), faculty of the Columbia Population Research Center (2014-present), core member of the Data Science Institute (2019-present), co-chair of the computational social science group (2019-present) and faculty affiliate of the Center for African American Politics and Society all at Columbia University.
4. My scholarship focuses on the ways we characterize the meaning and significance of racism in academic and public discourse and how these characterizations inform the ways we measure and assess the effects of racism in empirical health research. I focus specifically on structural and cultural dimensions of racism in US contexts and identifying social, structural and cultural factors that contribute to racial inequities in health and disease in US populations. In a secondary line of work, I explore applications of emerging technologies in addressing racial inequities in health.
5. Attached and incorporated by reference to this declaration is a copy of my curriculum vitae. (Attached here as Attachment A).
6. **Racial Inequities in Population Health:** Racial Discrimination and racism are the fundamental causes of racial inequities in health. As such, racial inequalities in health cannot be eliminated without directly addressing structural racism. Namely, racial inequalities across social and cultural institutions, including housing and neighborhoods, labor, credit markets, education, criminal justice, economic, health care and media systems interact to create systems of disadvantage that create pervasive adverse conditions for the health of Black

people living in the United States.<sup>1</sup> As a result of structural racism, the Black population in the US has a higher rate of chronic illness, co-occurring illness and tend to develop these illnesses earlier in life than Whites. This includes illnesses that pose elevated risk to the effects of COVID-19, such as diabetes, asthma, hypertension, heart disease, obesity and cancer.<sup>2</sup>

7. The relationship between structural racism and increased disease risk have been demonstrated in several different ways, I will highlight two factors, racial residential segregation and racial discrimination in medical care, which are related to racial inequities in COVID-19 infection and mortality risk in South Carolina.
8. First, racial residential segregation,<sup>1</sup> which was produced and maintained in South Carolina by state laws and practices, as well as by federal programs and federally supported private policies, resulted in discriminatory zoning, predatory mortgage lending and redlining (systematic denial of resources to designated areas). The systematic restriction of resources in Black communities has contributed to higher concentrations of poverty and low-quality housing, unemployment and under-employment, uninsured or underinsured (limited coverage, high co-pays and deductibles), restricted access to quality and affordable foods (greater number of fast food outlets and fewer supermarkets) as well as elevated exposures to physical and chemical environmental hazards (5 to 20 times higher in Black communities compared to White communities, even after controlling for socioeconomic factors). Each of

---

<sup>1</sup> Cogburn, CD. (2019) Culture, race and health: Implications for racial inequities and population health. *Milbank Quarterly*, 97(3); 736-761; Phelan, J.C., Link, B.G. (2015). Is racism a fundamental cause of inequalities in health? *Annual Review of Sociology*, 41; 311-30; Williams, DR, Lawrence, JA, Davis, BA (2019). Racism and health: Evidence and needed research. *Annual Review of Public Health*, 40; 105-25.

<sup>2</sup> *Assessing risk factors for severe COVID-19 illness*. Centers for Disease Control and Prevention: <https://www.cdc.gov/coronavirus/2019-ncov/covid-data/investigations-discovery/assessing-risk-factors.html> (Apr 23, 2020)

these factors are independently critical to disease risk and outcomes, such as obesity, cancer and asthma and are more likely to co-occur in Black as opposed to White communities.

9. At least one national study suggests that eliminating residential segregation would erase Black-White differences in income, education and unemployment, which are significant predictors of health and health inequality.<sup>3</sup> For Black people, residential segregation is also associated with risk of low birth weight and pre-term birth, later stage diagnosis of cancer, elevated mortality and lower survival rates for certain cancers and higher rates of obesity. This is attributed to a number of structural factors including, increased exposure to environmental pollutants and restricted access quality health insurance. Regardless of income, Black people are more likely to live in communities with poorer socioeconomic resources. Some data suggest that the average affluent Black household (income of \$75,000 or more) lives in poorer neighborhoods than average lower income White households (less than \$40,000). Racial bias in housing valuation is also evident such that homes in Black communities are undervalued by \$48,000 per home on average around the country. In Columbia, SC, for instance, homes in Black communities are devalued by an average of 10%, which amount to significant cumulative losses in household and community resources over time.<sup>4</sup>
10. Second, there is substantial evidence of racial discrimination in medical care provision (preventive care, early intervention and management of chronic disease), even after adjusting factors, such as insurance coverage.<sup>5</sup> Black people compared to Whites receive inferior

---

<sup>3</sup> Cutler, DM, Glaeser, EL. 1997. Are ghettos good or bad? Q.J. Econ. 112; 827-72.

<sup>4</sup> Perry, AM, Rothwell, J, Harshbarger, D. The devaluation of assets in black neighborhoods: The case of residential property. <https://www.brookings.edu/research/devaluation-of-assets-in-black-neighborhoods/> (Nov. 27 2018)

<sup>5</sup> Williams, DR, Rucker, TD (2000). Understanding and Addressing Racial Disparities in Health Care. *Health Care Financial Review*, 21(4), 75-90.

health services across a wide range of illnesses, health care services and treatment interventions, which is in turn associated with greater mortality for Black patients. Across nearly every type of diagnostic and Black patients are less likely to be referred for major therapeutic procedures (e.g., invasive diagnostic, therapeutic and innovative interventions for heart disease, stroke, cancer, disease prevention screenings and programming), are systematically undertreated for pain (even among children) and are more likely to be misdiagnosed when compared to White patients with similar clinical disease characteristics and accounting for medical histories, quality of health insurance and other socioeconomic factors. Racial bias in algorithms used to automate the allocation of health care to patients have also been observed, such that Black patients were less likely to be referred to programs aimed at care for complex needs even when they were equally as sick as White patients.<sup>6</sup>

11. **Racial Inequities in COVID-19:** Emerging data related to COVID-19 infection and mortality rates indicate a disproportionate burden of illness and death among racial and ethnic minority groups. Recent reports indicate that Black individuals who comprise approximately 21% of the population in areas included in the analysis, make up over 40% of infection-related mortality.<sup>7</sup> Other estimates based on national data place the COVID-19 related mortality rate for Black people at 2-5 times greater than the rate observed for Whites. Substantial empirical evidence examining associations between race and health would suggest that the racial inequities being observed in COVID-19 are not the result of immutable differences between racial groups. Effectively addressing racial inequities in COVID-19

---

<sup>6</sup> Obermeyer, Z., Powers, B., Vogeli, C. & Mullainathan, S. Dissecting racial bias in an algorithm used to manage the health of populations, *Science* 336, 447–453 (2019).

<sup>7</sup> *Cases of Coronavirus Disease (COVID-19) in the U.S.* Centers for Disease Control. <https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/cases-in-us.html> (Apr 26 2020)

related infection and death will require careful consideration of structures and processes that systematically disadvantage Black persons and buoy health advantages among Whites.

12. **Southern Region Estimates**<sup>8</sup>: Black people are generally at greater risk of COVID-19 infection and infection-related mortality and are also concentrated in the South. Nearly half of the Black US population resides in southern states, which recent regional estimates predict will ultimately experience the highest rates of death related to COVID-19 infections.

13. **South Carolina Estimates**: Early data for COVID-19 infection and mortality in South Carolina are consistent with national patterns and are highly concerning. The rate of infection and death for Black residents far exceeds their representation in the general population as well as overall levels for White citizens. Specifically, Black people living in South Carolina comprise 27% of the population but 57% of COVID-19 related deaths, making them 5 times more likely than Whites to die from the infection.<sup>9</sup> The racial disparities in COVID-19 infection rates and deaths in South Carolina are among the most startling in the country. The structural factors believed to contribute most significantly to elevated risk at the national level are also evident in South Carolina, including state legislators opting out of Medicaid expansion and instead imposing work requirements that disadvantage access for the

---

<sup>8</sup> Dixie in the crosshairs: The south is likely to have America's highest death rate from COVID-19, Eth Economist: <https://www.economist.com/graphic-detail/2020/04/25/the-south-is-likely-to-have-americas-highest-death-rate-from-covid-19?fsrc=scn/tw/te/bl/ed/dixieinthecrosshairsthesouthislikelytohaveamericashighestdeathratefromcovid19graphicdetail> (Apr 25 2020)

<sup>9</sup> Fleming Smith et al., *Long-term inequities put SC minorities at higher risk for coronavirus exposure and death*, THE POST & COURIER (Apr. 15, 2020); Tonya Brown, *More African Americans are dying from COVID-19 than other races in South Carolina*, 15 NEWS (Apr. 9, 2020) <https://wpde.com/news/coronavirus/more-african-americans-dying-from-covid-19-in-south-carolina>.

underemployed<sup>10</sup>. These policy decisions are particularly harmful to health care for Black residents in South Carolina<sup>11</sup>.

14. Black residents in South Carolina are also more likely than White residents to be employed in “essential roles” (e.g. manufacturing and service jobs) that increase risk of exposure and infection<sup>9,12</sup>. It should also be noted that due to national shortages of personal protective equipment (PPE)<sup>13</sup>, individuals employed non-health essential roles may be less likely to have access to and be trained for effective use of PPE. Higher rates of chronic illness among Black South Carolina residents and lower access and quality of health care compared to Whites are also tied to structural inequities in income, employment, and exposure to environmental pollutants concentrated in Black neighborhoods.

15. **COVID-19 Testing and Ventilator Use<sup>14-15</sup>**: Racial bias in access to testing are also emerging and suggest that Black people are less likely than White people to be referred for testing when presenting comparable signs of infection, such as cough and fever. Racial discrimination in testing may actually contribute to an underestimation of racial inequities in infection rate and mortality for Black individuals. Current data regarding ventilator use by

---

<sup>10</sup> South Carolina gets green light to impose Medicaid work requirements. National Public Radio, <https://www.npr.org/2019/12/13/787927652/south-carolina-gets-green-light-to-impose-medicaid-work-requirements> (Dec 13 2019).

<sup>11</sup> Garfield, R, Orgera, K (2020). The coverage gap: uninsured poor adults in states that do not expand Medicaid. <https://www.kff.org/medicaid/issue-brief/the-coverage-gap-uninsured-poor-adults-in-states-that-do-not-expand-medicaid/>

<sup>12</sup> <https://www.theguardian.com/commentisfree/2020/apr/16/black-workers-coronavirus-covid-19>

<sup>13</sup> *Ventilator stockpiling and availability in the US*. Johns Hopkins Bloomberg School of Public Health, Center for Health Security. <https://www.centerforhealthsecurity.org/resources/COVID-19/COVID-19-fact-sheets/200214-VentilatorAvailability-factsheet.pdf> (Apr. 1, 2020)

<sup>14</sup> Farmer, B. *The Coronavirus doesn't discriminate but U.S. health care showing familiar biases*. National Public Radio: <https://www.npr.org/sections/health-shots/2020/04/02/825730141/the-coronavirus-doesnt-discriminate-but-u-s-health-care-showing-familiar-biases> (Apr 2 2020)

<sup>15</sup> *Health data in the COVID-19 crisis: How racial equity is widening for patients to gain access to treatment*: <https://rubixls.com/2020/04/01/health-data-in-the-covid-19-crisis-how-racial-equity-is-widening-for-patients-to-gain-access-to-treatment/>



race do not yet appear to be publicly available<sup>16</sup>. It is clear that the need for ventilators significantly outweighs supply, requiring medical personnel to deny life-saving care to those in need. The “save-the-most-lives” principle many for ventilator access has been called into question (and recently modified) and represents the ways in which medical decision can perpetuate racial inequities in health. Following this principle perpetuates existing inequities such that those who exhibit worse health and lower life expectancy as a result of historical and structural inequality, particularly Black people, are most likely to be denied life-saving care<sup>17-18</sup>. In addition to substantial evidence of racial discrimination in medical care provision, there is also evidence that in times of scarcity (perceived and actual) White people are more likely to perceive racial and ethnic minorities as less deserving of scarce resources, including life-saving efforts<sup>19-20</sup>. The complexities surrounding these decisions in response to COVID-19 and implications for racial inequities in mortality rates will be revealed in the coming months and years. There is a precedent for concern, however, that additional racial bias will emerge in medical decisions related to the employment of life saving procedures by race.

16. **Conclusion:** Due to the factors discussed above, I conclude that Black people’s elevated risk in COVID-19 infection is tied to pre-existing and evolving inequities in structural systems and social conditions. As a result, any voting requirement requiring them to break social

---

<sup>17</sup> McLane, H (2020). A disturbing medical consensus is growing. Here’s what it could mean for Black patients with coronavirus. <https://whyy.org/articles/a-disturbing-medical-consensus-is-growing-heres-what-it-could-mean-for-black-patients-with-coronavirus/> (Apr 10 2020).

<sup>18</sup> Schmidt, H (2020). The way we ration ventilators is biased: Not every patient has a fair chance. <https://www.nytimes.com/2020/04/15/opinion/covid-ventilator-rationing-blacks.html> (Apr 15 2020)

<sup>19</sup> Krosch, AR, Tyler, TR, Amodio, DM (2017). Race and recession: Effects of economic scarcity on racial discrimination. *Journal of Personality and Social Psychology*, 113(6), 892-909.

<sup>20</sup> Krosch, AR (2020). The pandemic could lead to more discrimination against Black people: <https://blogs.scientificamerican.com/voices/the-pandemic-could-lead-to-more-discrimination-against-black-people/> (Apr 23 2020).

distancing protocols would place them at higher risk for infection and also threatens public health of the Black community more broadly. We will not be able to immediately address the deeply entrenched social and structural factors contributing to the significantly elevated risk to COVID-19 related infection and mortality among Black people. We can, however, acknowledge the significance of these factors and take immediate steps to minimize exposure for groups most gravely threatened by exposure to COVID-19. This includes city and state regulation of social distancing practices to minimize exposure and spread of infection to support safe voting practices under the conditions of COVID-19.

17. I declare under penalty of perjury that the foregoing is true and correct. Executed on April 27, 2020.



---

Courtney D. Cogburn, PhD